

# MANUFACTURING EXTENSION PARTNERSHIP

## Success Stories from the Field

### Kentucky Association of Electric Cooperatives

Kentucky Manufacturing Assistance Center

#### Kentucky Association Of Electric Cooperatives Initiates A Lean Transformation

##### Client Profile:

Kentucky Association of Electric Cooperatives, a membership-owned organization formed nearly 50 years ago when the Kentucky Rural Electric Cooperative Corporations (RECC) united, is a manufacturer of electrical and pole-mount transformers and supplier of electrical needs to rural Kentucky. The company, located in Louisville, Kentucky, employs 300 people and serves all states east of the Mississippi River as United Utility Supply (UUS); it is recognized as one of the country's leading material supply cooperatives serving the rural electric market.

##### Situation:

In recent years, Kentucky Association of Electric Cooperatives (KAEC) discovered an increased demand for pad-mount transformers. KAEC addressed this growth market by buying the tank (transformer container) for the pad mount and manufacturing its internal components. However, because of limited suppliers and required powder-coated finishes, the high cost of the tanks has placed KAEC at a competitive pricing disadvantage. KAEC conducted a study that indicated progressive savings could be realized by purchasing unfinished tanks and finishing them in-house, purchasing components and assembling in-house, and lastly, fabricating the tank in-house. Based on the study, KAEC developed a six-phase plan to reduce transformer costs, primarily focusing on the pad mount transformer. The company asked the Kentucky Manufacturing Assistance Center (KMAC), a NIST MEP network affiliate, to provide a high-level, third-party critique of the project.

##### Solution:

KMAC conducted its critical review of KAEC's project by creating a current state map of the pad-mount transformer assembly area to fully understand KAEC's current production processes. Then KMAC provided a detailed critique of each of the six phases, including specific and detailed recommendations for application of advanced manufacturing methodology, technology, or philosophy--along with the information to support these findings. KMAC found that KAEC's plan will lead to new levels of technology and operations not currently among its core skills, and that extensive planning, project management, training, capital appropriation, and engineering support--along with strong leadership--all will be necessary for success.

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**Results:**

Retained 7 jobs.  
Saved \$75,000 in miscellaneous costs.  
Made a plant/equipment investment of \$160,000.  
Improved sales by 1 to 2 percent per employee.  
Improved profit margin.  
Increased competitive position.  
Reduced unit labor costs by 1 to 2 percent.  
Improved strategic planning/understanding of costs.

**Testimonial:**

"Deciding to have the Kentucky Manufacturing Assistance Center critique our plans proved to be an excellent decision. Besides providing us with a knowledgeable and professional outside view that we could trust, their observations and recommendations gave us insights and perspectives that will have a significant impact on our implementation plans, and ultimately, our competitive position."

Charlie Drexler, Director of Engineering/Quality